Amendments to the Claims:

As requested by the Examiner on page 8 of the Office Action, following is a courtesy copy of the pending claims, showing changes relative to the prior pending version.

The enclosed substitute specification provides the amended claims in the proper format for a reissue application, showing changes relative to the patent specification in effect as of the date of filing of the reissue application, in accordance with MPEP §1453.

- 1. (Original) A composition of matter comprising: a solid phase support having one or more spacially discrete regions; and a uniform population of substantially identical oligonucleotide tag complements covalently attached to the solid phase support in at least one of the one or more spacially discrete regions, the oligonucleotide tag complements comprising a plurality of subunits, each subunit consisting of an oligonucleotide having a length from three to six nucleotides and each subunit being selected from a minimally cross-hybridizing set, wherein a subunit of the set and a component of any other subunit of the set would have at least two mismatches.
- 2. (Original) The composition of matter of claim 1 wherein said plurality of said subunits is in the range of from 4 to 10.
- 3. (Original) The composition of matter of claim 2 wherein said solid phase support is a microparticle having a single spacially discrete region.
- 4. (Original) The composition of matter of claim 3 wherein said microparticles is selected from the group consisting of glass microparticles, magnetic beads, and polystyrene microparticles.
- 5. (Currently amended) A composition of matter comprising a plurality of a thousand or more from ten thousand to a hundred thousand different polynucleotides selected from cDNA molecules or fragments of a target polynucleotide, said composition including a

mixture of microparticles,

wherein each microparticle has polynucleotides of the plurality attached thereto, and wherein substantially all different polynucleotides in the plurality are attached to different microparticles.

6. (Previously presented) The composition of claim 5 wherein about 10⁵ of said polynucleotides are attached to each of said microparticles.

7-8. (Cancelled)

9. (Currently amended) The composition of claim 5 A composition of matter comprising a plurality of different polynucleotides selected from cDNA molecules or fragments of a target polynucleotide, said composition including a mixture of microparticles,

wherein tag complements are attached to each of said microparticles of said mixture, and wherein each of said cDNAs or said fragments of said plurality has an oligonucleotide tag attached, such that perfectly matched duplexes are formed between the tag complements of said microparticles and the oligonucleotide tags of said cDNAs or DNA fragments;

whereby, each microparticle has polynucleotides of the plurality attached thereto, and substantially all different polynucleotides in the plurality are attached to different microparticles.

10. (Previously presented) A composition of matter comprising: a solid phase support having one or more spacially discrete regions; and uniform population of substantially identical oligonucleotide tag complements covalently attached to the solid phase support in at least one of the one or more spacially discrete regions, the oligonucleotide tag complements being selected from a minimally cross-hybridizing set of oligonucleotides having a length in the range of from 12 to 60 nucleotides and differing from one another by at least two nucleotides.

11. (Cancelled)

- 12. (Previously presented) The composition of claim 10 wherein said oligonucleotide tag complements differ from one another by at least three nucleotides and wherein said solid phase support is a microparticle having a single spacially discrete region.
- 13. (Currently amended) The composition of claim 12 wherein said length of said oligonucleotide tag complements is are in the range of from 25 to 40 nucleotides.